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**How Collective Participation Impacts Social Identity: A Longitudinal Study  
From India**

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## How Collective Participation Impacts Social Identity: A Longitudinal Study

### From India

#### Abstract

A key issue for political psychology concerns the processes whereby people come to psychologically invest in socially and politically significant group identities. Since Durkheim, it has been assumed that participation in group-relevant collective events increases one's investment in such group identities. However, little empirical research explicitly addresses this or the processes involved. We investigated these issues in a longitudinal questionnaire study conducted at one of the world's largest collective events – a month-long Hindu festival in north India (the *Magh Mela*). Data gathered from pilgrims and comparable others who did not attend the event show that one month after the event, those who had participated (but not the controls) exhibited heightened social identification as a Hindu, and increased frequency of prayer rituals. Data gathered from pilgrims during the festival predicted these outcomes. Specifically, perceptions of sharing a common identity with other pilgrims and of being able to enact one's social identity in this event helped predict changes in participants' identification and behavior. The wider significance of these data for political psychology is discussed.

#### Keywords

Social Identification, Collective Participation, Crowd Psychology, Collective Self-Realization, Pilgrimage

## **How Collective Participation Impacts Social Identity: A Longitudinal Study**

### **From India**

Our research asks if and how participation in a collective event affects participants' subsequent social identification and behavior. The significance of this question derives from the centrality of identity across the social sciences. As Wetherell (2010) notes: "the study of social identity has been synonymous with the study of social categories, roles and social locations such as 'woman', 'black', 'American', 'worker'. For current researchers who understand identity in this way, it remains one of the most important and significant points at which new formations of 'race', colonization and empire, ethnicities, sexuality, gender, disabilities and social class etc. can be interrogated" (2010, p.4). Indeed, it is through the subjective process of acquiring social identities, that people come together, form solidarities within the boundaries of identity and develop antagonisms across identity boundaries. Through this process they come to constitute the social forces through which our world is constituted. In short, the study of social identities brings together psychological dynamics and political process. It is the prime locus for a political psychology (Reicher, 2011).

For so-called 'primordialists' certain categories (notably ethnic categories) are taken-for-granted and it is assumed that people will identify with them such that inter-group conflict arises from the 'reawakening' of old loyalties (see Chandra, 2012 for a critique). Others, however (including Chandra), highlight the fluidity of identity categories and the social processes shaping their production. This is apparent in work addressing why and when politicians advance particular identity constructions (Chandra, 2012) and the strategic construction of identities (Hopkins & Kahani-Hopkins, 2004). Here, we address the question of what sort of experiences lead ordinary people to invest in given identities. Our underlying assumption is identities serve to orient and guide people through the social world – they tell

us how to live and how to act (Wetherell, 2010). Hence, identities must 'fit' with the structure of social experience if they are to be adopted, and we are particularly interested in people's identity experiences at mass events.

Durkheim proposed that mass events, especially ritualized collective events, create and consolidate the social identities that shape our everyday interactions (Durkheim, 1912, 1995). This has led historians and social anthropologists to assume that such events (e.g., festivals and memorial days) have important social and political consequences (e.g. Gillis, 1994, Ozouf, 1991). However, there has been little empirical investigation of whether participation does indeed revivify participants' social identifications, and if so, how. Moreover, there been little work relating such experience to the social and political organization of society. In part this reflects a tendency to assume that the psychology of mass events is distinctive and removed from everyday life. Following Le Bon's (1896/1947) analysis of crowd behavior, psychology has tended to assume that the behavior of people in mass gatherings is an aberration telling us little about the normal functioning of individuals in society (Reicher, 2011). Such is the power of this characterization of crowd psychology that even more sympathetic readings of mass events tend to imply that they are rather exotic and of limited relevance for everyday life. Thus, referring to Victor Turner's (1973) famous analysis of pilgrimage, Ehrenreich (2007) observes that although it gave 'group behavior a legitimate place in anthropology' it 'was a marginal and second-rate place' (p. 11). Indeed, collective events have typically been characterized as offering a form of occasional relief from the structure of everyday reality rather than as being important in shaping that structure. But this is beginning to change.

*Social identity at collective events*

Recent analyses of crowd behavior have started to challenge the characterization of collective events as marginal to central social psychological questions (Reicher, 2011). Drawing on the social identity approach to group behavior (Turner, Hogg, Oakes, Reicher & Wetherell, 1987), studies have shown that people's behavior in crowds is neither random nor meaningless. Rather than losing identity (and hence losing control of their actions), crowd members' behavior reflects the contents of collective identity and is meaningful to those involved (Reicher, 1984). Moreover, the social identities enacted in such events have their roots in crowd members' everyday experiences.

More recently, researchers have begun to explore how participation in collective events feeds back into individuals' post-participation social identifications. Ethnographic analyses of collective protests show participants report changes in their relationships with other crowd members (Drury & Reicher, 2000), and changes in how they define themselves. Thus, Drury and Reicher's (2000) work shows that although crowd members were initially concerned with local and restricted interests (e.g., to stop damage to local areas of natural beauty), they emerged radicalized (and self-defined as 'anti-capitalist'). Moreover, some reported that their experience of participation fed back into their commitment to future protest (Drury & Reicher, 2005). However, such work is not longitudinal: the evidence of change is either retrospective (claims after an event that identity has been strengthened) or prospective (claims that experience in a prior event will make one participate more in the future).

Other research has employed experimentation to address the impact of participation. For example, van Zomeren, Leach and Spears (2010, 2012) provide experimental evidence that increasing the extent to which people believe that collective action will achieve group-relevant goals increases social identification. However, again, such work lacks a longitudinal dimension. It is based on the assumption that participation increases a belief in goal

achievement and then demonstrates the impact of such beliefs on identification. But this does not show directly that identification increases after participation. Indeed, the authors acknowledge that while their study has strong internal validity, it lacks external validity (van Zomeren et al., 2010, p. 1059).

In this paper we provide properly longitudinal data on the impact of participation in a collective event in a design that includes a control group of non-attendees. Moreover, we explore some of the important psychological processes through which such impact (if any) is produced. This requires consideration of the psychological transformations that can occur in collective events.

### *Theorizing the impact of participation*

Social identity theorists (e.g. Neville & Reicher, 2011; Reicher, 2011) draw a key distinction between a physical crowd (or aggregate) comprising people who are physically co-present but who have no sense of inter-connection (e.g. shoppers in a mall) and a psychological crowd comprising people who are co-present and who have a sense of sharing a common social identity (e.g. Americans at a July 4<sup>th</sup> celebration).

This sense of social identity entails two elements. The first is one's own individual sense of belonging to the broader category (identity strength – e.g. 'I am an American') and is about being part of an 'imagined community' (Anderson, 1993). While this is important, it is not sufficient to explain crowd experience: it is perfectly possible to imagine oneself as part of an American community when alone (say watching the football world cup on the TV) or amongst a group of non-Americans. The second element of crowd experience is the sense that other co-present individuals share the same identity as oneself and, what is more, that those present see each other as sharing the same identity (e.g. 'we are all Americans'). This shared identity is less about belonging to the imagined community than a sense of community



amongst an embodied mass of people: It is not so much a connection to an abstract category than to concrete others. While such 'shared identity' (as we term it) does not occur in all crowds, where it does, there are a number of consequences concerning the relations between people.

Where there is shared identity, there is a shift towards intimacy amongst crowd members (Reicher, 2011) such that people begin to cooperate, to trust and respect each other, to provide mutual support to each other (see Reicher & Haslam, 2010). In turn, this facilitates effective co-action amongst group members, which makes them more effective in realizing group goals (Drury & Reicher, 2000, 2005; Hopkins et al., in press; Pandey, Stevenson, Shankar, Hopkins, & Reicher, 2014). That is, as a function of shared identity, the crowd becomes a space in which members are able to enact their identities, to turn identity-related ideals into a reality. We term this accomplishment 'collective self-realization' (CSR – see Reicher & Haslam, 2006).

Returning to the argument that identities are assumed to the extent to which they fit with the structure of social experience, we expect that CSR would lead to greater identification with the relevant category: It is by making abstract injunctions into manifest practices that the associated identities become meaningful and useful to us. This implies that whilst having a sense of broad category membership (identity strength) is important in bringing about collective participation in the first place (see van Zomeren, Leach & Spears, 2012), the enhancement of identification which occurs through participation depends upon a sense of shared identity amongst those actually co-present with this facilitating the co-ordination of action amongst these people (and hence their ability to enact identity-based norms and values). More technically, we propose that the impact of participation on change in identity strength is a function of shared identity and that this effect is mediated by CSR.

As indicated, there is rich and suggestive work, mainly ethnographic, supporting the strands to this argument: the impact of shared identity on relations amongst group members (Neville & Reicher, 2011), the link from intimate social relations to CSR (Drury & Reicher, 2005; Hopkins et al., in press; Pandey et al., 2014), and the link from CSR to identity strength and commitment to the group (Drury & Reicher, 2005, 2009). Yet, this evidence is limited by the fact that it is not systematic, it never investigates the process as a whole, and it is not fully longitudinal. Ideally, an account of the change process must collect data at three time points, showing how changes in identity from before to after an event are explained by evidence (concerning levels of shared identity and CSR) collected during the event.

It is far from straightforward to study the same people before during and after participation in an event. It is even harder to do this alongside a comparable non-participant control group in order to ensure change is due to participation itself rather than some other factor that occurred between the pre- and post-event time-points (such as political events that may make certain identities more salient for everybody). Such problems are compounded when the events of interest are spontaneous. Yet, even pre-planned events (e.g., national commemorations, religious festivals) present serious logistic difficulties.

Perhaps the most rigorous analysis available is an ingenious study of Pakistani pilgrims undertaking the *hajj* (the pilgrimage to Mecca: Clingingsmith, Khwaja & Kremer, 2009). This took advantage of the fact that in Pakistan there is a lottery to decide who can take up the limited number of available places, and so was able to compare data provided by successful and unsuccessful applicants after the *hajj*. However, although allowing a comparative element, the study was not fully longitudinal since data were only collected after the *hajj*. Also, no data were collected during the event to examine what might explain differences between participants and non-participants. Moreover, it focused on social and political attitudes rather than the basic questions we have identified above: whether and how

participation re-vivifies the core social identities that shape everyday social relationships and social action.

Our research aims to provide fully longitudinal data so as to be able to address questions of change and process. Before outlining the study, we describe the event itself.

### *The Prayag Magh Mela*

Each year, during the Hindu lunar month of *Magh* (mid-January to mid-February) pilgrims (typically elderly Brahmins from rural North India) gather on the banks of the *Ganges* and *Yamuna* rivers at *Prayag* (Allahabad, Uttar Pradesh, India). Prayag is amongst the holiest of Hindu spiritual locations and every 12 years is the site of the *Maha Kumbh Mela*. However, even in non-Kumbh years it attracts millions, several hundred thousand of whom (known as *Kalpwasīs*) live for a month in tents on the Ganges floodplain. These latter undertake this participation as part of a longer-term commitment to attend the Mela over 12 years (often more). Participation in the Mela is not a religious duty for Hindus in the same way as participating in the *hajj* is for Muslims and many highly identified Hindus do not undertake it.

A pilgrimage may be conceptualized as ‘a journey undertaken by a person in quest of a place or state that he/she believes to embody a valued ideal’ (Morinis, 1992, p. 4). For the *Kalpwasīs*, this ideal entails relinquishing worldly concerns and pursuing the spiritual (Hopkins et al., in press). They live in basic conditions, adopt a simple diet of one vegetarian meal a day, and immerse themselves in prayer rituals - most notably bathing in the sacred rivers twice a day. Features of the environment judged as congruent with this identity-related lifestyle are welcomed, and those judged incongruent are not. Thus, noises believed to have religious connotations are welcomed, but those with secular connotations are judged intrusive (Shankar, et al, 2013) and processed differently (Srinivasan, et al, 2013). Our research

concerns the question of how one's sense of being part of the broad Hindu 'imagined community' is affected by the concrete experience of being a pilgrim and of being surrounded by a set of fellow pilgrims.

*Shared identity and collective self-realization in the Mela*

Kalpwasīs are easily distinguishable (e.g., by their living area in the Mela site and their routines) and differentiate themselves from others attending the Mela for only a few days. This provides a basis for a strong shared identity with Kalpwasīs seeing each other as part of a single group (Hopkins et al., in press). Moreover, when they participate in the rituals associated with being a Kalpwasi (e.g., listening to religious discourses given by saints, participating in singing and chanting, bathing in the Ganges) they do so with other Kalpwasīs. So too, when engaged in mundane activities (e.g., collecting water) they are surrounded by other Kalpwasīs. All this means that one's individual experience is shaped by others' behavior.

Enacting the Kalpwasi identity entails adopting a distinctive lifestyle to reach a particular level of spirituality. For example, one Kalpwasi ideal is that one does not think badly of others. However, if one is to enact this socially-prescribed ideal, it is important that co-present others do so too: obviously if others within earshot gossip, one's own ability to enact this identity-prescribed ideal is compromised. So too, if a Kalpwasi is to avoid the distractions of music, it is important that others do not play such music (Shankar et al, 2013).

Although there may be a basis for shared identity amongst Kalpwasīs, this cannot be guaranteed. As studies of pilgrimage emphasize, it is erroneous to assume that all pilgrims necessarily share a common identity (Messerschmidt & Sharma, 1981). There can be factionalism (Eade & Sallnow, 2000) and competition for symbolic resources (Bilu, 1988).

Moreover, mundane tensions arise over access to material resources (e.g. water) to subvert a sense of shared identity.

Accordingly, we can make no assumptions about whether Kalpwasis attending the Mela experience either a shared identity with co-present others or whether they have a sense of being able to behaviorally enact the lifestyle specified for Kalpwasis. Both are empirical issues and we can expect individuals' experience of these to vary. However, we could predict that the more one has these experiences, the more participation would be psychologically meaningful and therefore consequential for post-event identity and behavior.

### *The study and hypotheses*

We conducted a longitudinal questionnaire survey of a sample of Kalpwasis attending the 2011 Magh Mela and a sample of others who did not. We focused on two outcomes: i. participants' cognitive self-definition as Hindu, and, ii, participants' performance of Hindu religious practices. Participants completed questions concerning such issues before (Time 1: T1) and after the event (Time 3: T3). Data concerning Kalpwasis' experience of the event were obtained during the event itself (Time 2: T2) when we gathered data concerning Kalpwasis' perceptions of: i. a shared identification amongst Kalpwasis, and ii. being able to enact the ideals associated with the Kalpwasi identity (collective self-realization).

We predicted pre-Mela (T1) to post Mela (T3) increases in the Kalpwasis' identification strength and the performance of religious practices. No such increases were expected amongst the controls. With regards to explaining the effect of participation, we predicted between-individual differences in the degree to which Kalpwasis experienced a sense of shared identity and a sense of CSR, and predicted these would explain variability in the degree to which participation was consequential. Specifically, we expected higher levels of CSR would result in stronger T3 identification and increased T3 religious practices. Also

we predicted that greater shared identity at the event would facilitate greater CSR.

Accordingly, we predicted that the relationship between shared identity and T3 identification strength and religious practice would be mediated by Kalpwasis' reports of the degree to which they were able to enact their Kalpwasis identity (CSR).

## METHOD

### *Sample*

Kalpwasis provided data at three time points (T1, T2, T3), Controls at two (T1, T3). The data reported here (available at <http://data-archive.ac.uk>) arise from those for whom we have T1 and T3 (and for the Kalpwasis sample, T2 data). 792 participants completed the pre-Mela (T1) survey (Kalpwasis = 604; Controls = 188). With attrition, 249 (31.44%) participants were lost giving an overall completion rate of 68.56%. Attrition was equivalent amongst Kalpwasis (188: 31.13%) and Controls (61: 32.45%). Analyses (at T1) revealed no meaningful differences between our final sample and those lost through attrition. The final sample consisted of 543 Hindus living within 100-120 Kms from Allahabad. 416 attended the Mela (Kalpwasis) and 127 comparable others did not (Controls).

Participants were recruited through local contacts in the rural areas surrounding Allahabad. Kalpwasis and Controls were recruited in the same way, from the same locations. They were selected so as to be similar and Table 1 presents information on their characteristics. The caste categories are used by the Indian Government to differentiate between those who are relatively privileged (GC) and those who are less so (OBC) (other caste categories below OBC exist but were not represented in our sample). The Kalpwasi sample tended to be somewhat older and higher caste, and performed more religious practices (the measurement of these variables is explained below).

----- Table 1 -----

As Kalpwasis do not simply participate in one Mela, but commit to participate in 12, it was inevitable that our Kalpwasis sample would have attended several previous Melas ( $M = 10$ ) whereas the Controls would not. However, the Controls allow us to ensure any change in the Kalpwasis was not due to social/contextual factors (e.g., a political event) occurring between the pre-Mela and post-Mela measurement points. As the social significance of a Hindu identity or the experience of the Mela itself may be affected by one's gender, age, caste, marital status and education, our key analyses controlled for these socio-demographic characteristics.

#### *Measures*

Questionnaire items were developed through piloting, and were improved through translation and back-translation (English-Hindi-English).

Except where stated otherwise, we employed 5-point scales illustrated with drawings of five glasses containing increasing levels of water ranging from empty to full (anchored: 1 = "Not at all"; 5 = "Completely" (which conceptually translates into English as "A lot": Tewari, Khan, Hopkins, Srinivasan, & Reicher, 2012). The items are reported below. Responses were averaged to obtain scale scores.

#### *Outcome measures (T1 and T3)*

*Identification Strength.* Three items: "To what extent does being Hindu matter to you?"; "To what extent is being Hindu a key part of your life?"; "To what extent is being a Hindu central to your sense of who you are?" The scale's reliability for each sample at each time was excellent (Cronbach's alphas: T1 Kalpwasis = .88; T3 Kalpwasis = .95; T1 Control

= .89, T3 Control = .92). The overall means and standard deviations at T1 and T3 were: T1  $M = 4.73$ ,  $SD = .52$ ; T3  $M = 4.72$ ,  $SD = .49$ .

*Religious Practices.* Three items: “*In the last week, how often have you performed morning pujas (prayers)?*”; “*In the last week, how often have you performed evening pujas?*”; “*In the last week, how often have you read or chanted religious texts in your home?*” For each item, participants reported how many days over the last week they had engaged in such a practice (with 0 indicating none and every subsequent unit representing one day per week to a maximum of 7). The scale’s *Cronbach’s alphas* were as follows: T1 Kalpwasis = .61; T3 Kalpwasis = .54; T1 Control = .61; T3 Control = .60. Lowenthal (2001) notes that where items have face validity and the scale is brief, scale reliabilities of .6 are acceptable. Moreover, when scales refer to behaviors rather than attitudes, their reliabilities are likely to be lessened because a variety of factors beyond one’s control impact upon behavior. Accordingly, these reliabilities may be judged satisfactory. It may also be observed that, if anything, their properties could make it more difficult to detect effects of participation. The overall means and standard deviations for this scale at T1 were  $M = 4.91$ ,  $SD = 2.23$ ; T3  $M = 5.21$ ,  $SD = 2.10$ .

#### *Process measures (Kalpwasis at T2)*

*Shared Identity.* Kalpwasi participants completed five items introduced with the stem: “*To what extent do you think that all Kalpwasis...*”. The items were: “*...think of themselves as part of a single group?*”; “*...think of themselves as part of one large family?*”; “*...have a sense of ‘we-ness’ with other Kalpwasis?*”; “*...besides their differences, share the same identity?*”; “*...have a feeling of unity amongst each other?*”. *Cronbach’s alpha* = .88 ( $M = 4.54$ ,  $SD = .61$ ).



*Collective-Self-Realization (CSR)*. Participants completed five items introduced with the stem: “*In the period of Kalpwasis, to what extent do you feel you are able to*”. The items included: “*...fully overcome the restrictions of everyday life and live in accordance with your religious faith?*”; “*...fully live a simple life in accordance with religious teaching?*”; “*...completely ignore the everyday concerns of this world to concentrate on the spiritual?*”; “*...totally devote yourself to following religious scriptures?*”; “*...fully devote yourself to performing your religious rituals?*” Cronbach’s  $\alpha = .86$  ( $M = 4.43$ ,  $SD = .59$ ).

#### *Scale Properties*

We investigated the dimensionality of these four measures using Principal Axis Factoring (*Oblimin* rotation) which is appropriate for new measures. Pooling the Kalpwasis’ and Controls’ data we found that at T1 and at T3 the outcome items loaded on two factors: the Strength of Identification items loaded on one factor (loadings .79 - .93; cross loading = .13 to .16), and the Religious Practice items on another (loadings = .55 to .69; cross-loadings = .04 to .16). Turning to the T2 process items (Kalpwasis only), the Shared Identity items loaded on one factor (loadings .69 - .88; cross loading = .24 to .32) and the Collective Self-Realization items on another (loadings = .69 to .80; cross-loadings = .23 to .28). Finally, we explored whether the T2 process measures differed from the T1 and T3 outcome measures (Kalpwasis’ data only). Table 2 reports the factor structure for the T1 outcome measures and the T2 process measures, and shows the process items measure different things from each other and measure different things from the outcome measures. The factor structure of the T3 outcome measures and the T2 process measures was very similar.<sup>1</sup>

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<sup>1</sup> We also investigated the factor structure using Confirmatory Factor Analysis. When the two T2 process variables and the two T1 outcome measures were inspected, the four-factor model revealed a good fit ( $\chi^2 = (98) 360.31$ ,  $p < .001$ ,  $\chi^2/df = 3.68$ , CFI = .92, RMSEA = .08 (90% CI: .072 - .089), SRMR = .05). Also, when the two T2 process variables and the two T3 outcome measures were inspected, the four factor model revealed a good fit ( $\chi^2 = (98) 387.42$ ,  $p < .001$ ,  $\chi^2/df = 3.95$ , CFI = .92; RMSEA = .08 (90% CI: .076 - .093), SRMR = .05).

----- Table 2 -----

*Procedure*

The questionnaires were administered orally by 10 Hindi-speaking field investigators. Each questionnaire took approximately 30 minutes to complete. The T1 survey was administered in participants' homes one month before the 2011 Magh Mela. The T2 survey was administered to the Kalpwasis while camped on the Ganges's floodplain over the height of the Mela. The T3 survey was administered in participants' homes one month after the Mela. The time difference between T1 and T2 ranged between 49-68 days ( $M = 55$  days;  $SD = 4$  days), between T2 and T3 it ranged 24-43 days ( $M = 34$  days;  $SD = 4$  days), and between T1 and T3 it ranged 83-99 days ( $M = 90$  days;  $SD = 3$  days). There was no difference between the Kalpwasi and Control sub-samples in the number of days between T1 and T3 ( $t(541) = 1.23, p = .20, \text{Cohen's } d = .11$ ).

## RESULTS

First, (employing ANCOVAs) we consider change (T1 to T3) in the Kalpwasis' Identification Strength and Religious Practices relative to that for the Controls. Second, (employing hierarchical linear regression modelling) we examine the Kalpwasis' data to explore how the T2 process variables (Shared Identity and CSR) predicted T3 Identification Strength and Religious Practice.

*Participation outcomes (ANCOVAs)*

As we had different numbers of Kalpwasis and Controls we checked that the within-group covariance matrices in our ANOVAs were equal using Box's M test. All tests showed that the

assumptions for the ANCOVAs we report were met (as this test is highly sensitive the recommended criterion is  $p < .001$ , and we obtained values ranging from .003 and .016).

*Identification Strength.* At T1, 387 (70.30%) responded at ceiling (i.e., 5) on all three items assessing Identification Strength. There was a trend for a larger number of the Kalpwasis sample to be at ceiling (305 out of 416, or 73.30%) compared to the Controls (82 out of 127, or 64.60%),  $\chi^2 = 3.64, p = .056$ . As those at ceiling at T1 cannot possibly increase their identification on our measures, we divided our sample into those already at ceiling and those who were not. Analyses showed the Kalpwasi sample tended to contain more females (68.50% vs 51.10%,  $\chi^2 = 4.16, p = .04$ ) and perform more Religious Practices:  $M = 4.55, SD = 2.23$  vs  $M = 3.81, SD = 2.43, t(154) = 1.82, p = .07$ . On the other dimensions reported in Table 1, the two samples were similar.

Identification Strength was investigated in a 2 (T1 Identification: Ceiling/Not at Ceiling) X 2 (Condition: Kalpwasis/Controls) X 2 (Time: T1/T3) Mixed Factorial ANCOVA with Time as the repeated measure (and age, gender, caste, marital- and educational-status as covariates to control for any socio-demographic differences across the samples). This revealed a three-way interaction,  $F(1, 532) = 9.73, p = .002, \eta_p^2 = .02$  which was decomposed through two separate 2 (Condition: Kalpwasis/Controls) X 2 (Time: T1/T3) Mixed Factorial ANCOVAs (with the same covariates). One included those responding at ceiling at T1 ( $n = 387$ ; Kalpwasis:  $n = 305$ ; Controls:  $n = 82$ ), and the other, those who had not ( $n = 156$ ; Kalpwasis:  $n = 111$ ; Controls:  $n = 45$ ). For both we report Estimated Marginal Means (EMMs) and Standard Errors (SEs).

Amongst those at ceiling (i.e., their T1 scores were 5) both main effects and the interaction were non-significant (all effects  $p \geq .19$ : for information the Kalpwasis T3  $EMM = 4.82, SE = .02$ , and the Controls T3  $EMM = 4.76, SE = .05$ ). Amongst those *not* at ceiling, the main effect of Time was non-significant,  $F(1, 149) = .26, p = .61, \eta_p^2 = .00$ , as was that of

condition,  $F(1, 149) = 3.77, p = .054, \eta_p^2 = .03$ , and the interaction was significant,  $F(1, 149) = 9.33, p = .003, \eta_p^2 = .06$ . This interaction (reporting Estimated Marginal Means and Standard Errors) is plotted in Figure 1.

----- Figure 1 -----

Pairwise comparisons confirmed that amongst the Kalpwasis, identification increased from T1 ( $EMM = 4.10, SE = .05$ ) to T3 ( $EMM = 4.61, SE = .06$ ),  $F(1, 110) = 65.76, p < .001, \eta_p^2 = .37$ . For Controls this difference was non-significant ( $EMM = 4.10, SE = .08$ ; T3:  $EMM = 4.25, SE = .09$ ),  $F(1, 44) = 1.31, p = .26, \eta_p^2 = .03$ . Furthermore, whereas at T1 there was no Kalpwasi/Control difference,  $F(1, 149) = .89, p = .35$ , at T3 Kalpwasis reported stronger identification than the Controls,  $F(1, 149) = 11.74, p = .001, \eta_p^2 = .07$ .

*Religious Practices.* A 2 (Condition: Kalpwasis/Controls) X 2 (Time: T1/T3) Mixed Factorial ANCOVA (with Time as the repeated measures factor, and the same covariates as above) showed main effects of Time  $F(1, 534) = 13.87, p < .001, \eta_p^2 = .03$  and Condition (Kalpwasis vs Control),  $F(1, 534) = 31.44, p < .001, \eta_p^2 = .06$ . However, most importantly, the interaction was significant,  $F(1, 534) = 9.15, p = .003, \eta_p^2 = .02$  (see Figure 2).

----- Figure 2 -----

Pairwise comparisons confirmed that amongst Kalpwasis, Religious Practice frequency increased from T1 ( $EMM = 5.07, SE = .05$ ) to T3 ( $EMM = 5.51, SE = .19$ ),  $F(1, 415) = 20.13, p < .001, \eta_p^2 = .05$ . Amongst Controls there was no such increase (T1:  $EMM = 4.38, SE = .19$ ; T3:  $EMM = 4.19, SE = .18$ ),  $F(1, 126) = .44, p = .51, \eta_p^2 = .00$ . Analyses also

showed Kalpwasis enacted more Religious Practices than Controls at both T1,  $F(1, 540) = 10.50, p = .001, \eta_p^2 = .02$ , and T3,  $F(1, 540) = 43.17, p < .001, \eta_p^2 = .08$ .

We confirmed the robustness of these effects through repeating these analyses without the socio-demographic covariates. For both outcome measures the results were unchanged. These analyses also confirmed that the between-subjects effects were not affected by any inequalities in variance between the Kalpwasis and Controls.

### *Participation processes (hierarchical regression models)*

We analyzed the mechanisms through which participation was consequential in a hierarchical regression model in which the T2 process variables (Shared Identity and Collective Self-Realization) were entered as predictors of the T3 outcome variables (i.e., Identification Strength, Religious Practices). Each analysis controlled for participants' T1 scores on the relevant outcome measure and their socio-demographic characteristics. The order of variable entry was as follows: Step 1, level on outcome measure at T1; Step 2, age, gender, caste and marital-status (being female, lower caste, and widowed were coded zero); Step 3, education-status (illiterate was coded zero); Step 4, T2 Shared Identity; and Step 5, T2 Collective Self-Realization (CSR). In conducting these analyses we attended to the potential issue of multicollinearity amongst our measures through obtaining the *Variance Inflation Factor* (VIF) which measures how much the variance of an estimated regression coefficient is increased because of multicollinearity (values lower than 5 are desirable: O'Brien, 2007). The VIF values (included in Tables 5 and 6) were all perfectly acceptable.

*Identification Strength.* In-keeping with our earlier analysis we focused on Kalpwasis whose T1 Identification Strength was not at ceiling ( $n = 111$ ). Table 3 presents the results. The adjusted  $R^2$  values were non-significant at every step but the last one where the model explains 8% of the variance in T3 Identification Strength. Similarly, the  $R^2$  change value was

only significant in the fifth and final step of the model indicating that the effect of CSR explained a significant proportion of variance in T3 Identification Strength.

We then investigated whether Shared Identification with other Kalpwasis in the Mela had an indirect effect on T3 Identification Strength. This involved a bootstrapping procedure (Hayes, 2012; 5,000 bootstrap samples, 95% confidence intervals) in which Shared Identity was entered as the independent variable, T3 Identification Strength as the dependent variable and CSR as the mediating variable (with T1 Identification Strength and the socio-demographic variables as covariates). Variables were standardized to avoid multicollinearity. This analysis confirmed that Shared Identity had an indirect effect on T3 Identification Strength *via* CSR (*indirect effect* = .04, CI: .0096, .1102). We repeated these analyses using non-standardised measures. The results were unchanged. Moreover, we confirmed the model through testing an alternative in which we reversed the relationship between Shared Identity and CSR in predicting T3 Identification Strength. This alternative was not supported (*indirect effect* = -.01, CI: -.0495, .0257).

----- Table 3 -----

Thus, after taking into account T1 Identification Strength and the socio-demographic variables, the degree to which Kalpwasis felt able to realize their collective identity in the Mela predicted a significant (albeit modest) proportion of their T3 Identification Strength as a Hindu. Moreover, it is clear from the analysis of indirect effects that Shared Identity had an effect on T3 Identification Strength *via* CSR.

*Religious Practices.* The Kalpwasis' T3 performance of religious practices was investigated in the same way (see Table 4). The adjusted  $R^2$  values were significant at each step, with the model as a whole explaining 33% of the variance in T3 Religious Practices.

The  $R^2$  change values were significant at all steps except the third and fourth indicating that education and Shared Identity did not explain a significant proportion of variance in the model. T1 Religious Practices predicted T3 Religious Practices. Likewise age, gender and marital-status were significant at every step, with younger, male and widowed participants engaging in more T3 Religious Practices than older, female and married participants. More importantly, over and above the effect of T1 Religious Practices and the effects of the socio-demographic variables, CSR explained a significant proportion of variance in T3 Religious Practices.

--- Table 4 ---

Again we followed the same bootstrapping procedure described above: bias-corrected and accelerated bootstrapped 95% confidence intervals indicated an indirect effect of Shared Identity on T3 Religious Practices *via* CSR (indirect effect = .05, CI: .0019, .1052). Again, we repeated these analyses using non-standardized measures: the results were unchanged. We also tested an alternative model in which CSR had an indirect effect on T3 Religious Practices through Shared Identity (this was not significant: *indirect effect* = .00, CI: -.0454, .0509).

## DISCUSSION

Our data provide longitudinal evidence that participation in a collective event impacted participants' social identification and behavior. Amongst those whose pre-Mela level of identification as a Hindu was not at ceiling, we found a pre- to post-event increase in Identification Strength amongst the Kalpwasis that was absent amongst the Controls. Also, Kalpwasis (but not Controls) reported performing more Religious Practices after the Mela than before. The fact the effect obtained on Identification Strength was limited to a sub-

sample of participants (those who were not already at ceiling) should be underlined and will be returned to below.

Inevitably, field research brings its own problems. Random allocation to condition was impossible, and although the Kalpwasis and Controls were reasonably similar in their demographic characteristics, the former reported higher levels of T1 Religious Practice than controls. This probably reflects the fact that they had participated in more Melas. Nonetheless, the key point is that participation in the Mela still resulted in increased religious practice. Indeed, if anything the Kalpwasis' prior experience of the Mela should dilute any effect of participating in the Mela we studied because such prior participation could be expected to decrease the effects of any further participation. Accordingly, the fact we still obtain significant effects of participation is noteworthy. However, it is important to note that there might be other factors (e.g., individual differences associated with whether or not one is a Kalpwasi) that may be confounded in our design and such factors undoubtedly warrant future attention. For the time being we would note that any issues raised by non-random allocation to condition are offset by the ecological validity of our data, gathered before during and after an event of considerable importance in people's lives. Also the inclusion of a control group enriches our design and allows us to rule out some alternative accounts of our effects (e.g. political incidents).

Our results also point to some of the processes involved in these effects. The more participants believed they were able to realize the injunctions associated with their Kalpwasi identity (CSR), the greater the effect of participation. Moreover, our analyses of indirect effects show that the more they experienced a shared identity, the greater the CSR (with shared identity having an indirect effect on the post-participation outcomes *via* CSR). The fact our T2 process variables helped explain the effects obtained also adds weight to the argument that the T1 – T3 change found amongst the Kalpwasis (but not Controls) is indeed



related to the former's experience of participation. Yet, at the same time, the effects attributable to shared identity and CSR were modest. In some respects this is explicable: the process data were obtained during the event and the outcomes, approximately one month later (and in a very different context – back in their home). However, it is also clear that future studies should investigate other candidate processes. For instance, attending a pilgrimage may result in an increase in one's status in one's home village which itself has consequences for one's self-definition.

There are two other qualifications to note. First, any generalization made from this study must be at the level of process rather than outcomes. We believe there are underlying processes common to collective participation in general and that the degree to which these obtain in any event is an empirical question. We do not propose that every participant in every collective event will be affected. As is abundantly clear in our data, much will depend on participants' initial level of identification and if participants are at ceiling (as many were here) the effects of participation will be limited. However, even for those not at ceiling, participation may not be consequential. As our analyses show, one factor is the degree to which those co-present at the event conceive of themselves as sharing a social identity and feel able to realize their collective identity. This may be more easily achieved in some events than others. For example, there may be rituals (sometimes extreme: Xygalatas et al., 2013) that involve people acting in synchrony with others (e.g., chanting, clapping etc.) which may strengthen the bonds between participants (Reddish, Fischer, & Bulbulia, 2013). Also, some events may be more contested than others (giving rise to factionalism). Moreover, some participants may find their presence questioned such that although they identify with others they may feel marginalised and unable to enact their identification (Pehrson, Stevenson, Muldoon, & Reicher, 2013). Such experiences may reduce the extent of CSR and hence participants' post-event identification strength (and when interpreting our own data it is

appropriate to note that an overall increase in the Kalpwasis' identification strength does not necessarily mean everyone increased their identification).

Second, we need to consider the extent to which a study of religious participation in rural north India allows general claims about collective participation. As concerns the religious dimension, we should remember that, while religious identity may be comparatively understudied in political psychology (certainly compared to ethnic and national identities) it is of enormous social and political significance in everyday life not only in India (Puniyani, 2003) but also in the west (Graham & Haidt, 2010; Hopkins & Kahani-Hopkins, 2004). Furthermore, it is important to remember the long tradition (dating back to Durkheim, 1912/1995) of studying religious masses as a means of addressing intense phenomena that are fundamental to all collective life (Olaveson, 2001). Of course, although the processes involved in different events may be similar, the actual behaviors involved will differ from group to group as a function of the content of identity. Thus, CSR (which relates to the norms and values of the group) will take different forms in different collectivities. In demonstrations (where the goal is social change), CSR may involve behavior that imposes the crowd's will on an antagonistic outgroup (e.g., the police). Typically, this involves obstruction and sometimes, violence (Drury & Reicher, 2005). In the Mela (and in other religious events), the identity and hence the behaviors relevant to CSR are different (involving a focus on spirituality). Thus any generalization must be at the level of process rather than behavioral outcome. The incidence of shared identity and CSR and also the meaning of CSR will take unique forms in religious gatherings. But there is little reason to think that a religious gathering is unsuitable for investigating the proposition that identification increases as a function of shared identity and CSR in collective gatherings.

The same can be said concerning the Indian dimension of our work. This is a different demographic to that normally studied and the meanings associated with Hindu identity differ

from those associated with, say, Christian identity. However, it is a strength of our research that we address the value of a body of theory (the social identity approach) developed and tested primarily in urbanized Western settings amongst a rural Indian population - as long, that is, as we take into account the local cultural forms taken by psychological processes when drawing any lessons from the research (Hopkins & Reicher, 2011).

Here, there are three such lessons. First, for the first time, we have, quantitative data from a longitudinal study using comparable controls, that participation in collective events can increase social identification and identity-related behavior: crowds can indeed revivify social identities. Second, we show how the sense of connection to a concrete set of co-present others (Shared Identity) impacts the sense of belonging to an abstract 'imagined community' (Identity Strength) through the ways in which one becomes able to transform identity from a set of prescriptions into real lived experiences (CSR). Third, participation in collective events can help constitute who we are as social beings. It thereby shapes the solidarities and the divisions that make up both psychological and political realities. This implies that much may be lost by regarding crowds as merely marginal and exotic phenomena that occasionally erupt into ordinary life. Conversely, much may be gained through political psychologists bringing the analysis of collective events to the center of our studies.

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Table 1. Kalpwasi vs. Control Sample Characteristics

<i>N</i>	Kalpwasīs	Controls	
	416	127	
<i>Age</i>			
- <i>M (SD)</i>	64.38 (9.32)	60.90 (13.44)	$t(540) = 3.30, p = .001$
- <i>Range</i>	28 - 92	25 - 99	
<i>Gender</i>			
- <i>Males</i>	179 (43.00%)	63 (49.60%)	$\chi^2 = 1.71, p = .19$
- <i>Females</i>	237 (57.00%)	64 (50.40%)	
<i>Caste</i>			
- <i>General Caste</i>	384 (92.30)	109 (85.80%)	$\chi^2 = 4.89, p < .05$
- <i>Other Backward Caste</i>	32 (7.70%)	18 (14.20%)	
<i>Marital Status</i>			
- <i>Married</i>	327 (78.60%)	106 (83.50%)	$\chi^2 = 1.42, p = .26$
- <i>Widowed</i>	89 (21.40%)	21 (16.50%)	
<i>Education</i>			
- <i>Illiterate</i>	177 (42.50%)	44 (34.90%)	$\chi^2 = 2.82, p = .24$
- <i>Primary-Intermediary</i>	192 (46.20%)	63 (50.00%)	
- <i>University</i>	47 (11.30%)	19 (15.10%)	
<i>Identification Strength T1-- M (SD)</i>	4.73 (.53)	4.68 (.53)	$t(541) = 1.08, p = .28$
<i>Religious Practices T1 - M (SD)</i>	5.06 (2.17)	4.40 (2.38)	$t(541) = 2.94, p < .01$



Table 2. Item Loadings: T2 Process Variables and T1 Outcome Variables

Items	Factors			
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>
<u>Shared Identity (Process T2)</u>				
<i>To what extent do you think that all Kalpwasis:</i>				
1. <i>think of themselves as part of one large family?</i>	.88	(.02)	(.26)	(-.03)
2. <i>have a sense of 'we-ness' with other Kalpwasi?</i>	.84	(.06)	(.29)	(.03)
3. <i>have a feeling of unity amongst each other?</i>	.77	(.14)	(.31)	(.07)
4. <i>besides their differences, share the same identity?</i>	.74	(.08)	(.23)	(.07)
5. <i>think of themselves as part of a single group?</i>	.70	(-.05)	(.24)	(-.06)
<u>Collective Realisation (Process T2)</u>				
<i>In the period of Kalpwasi, to what extent do you feel you are able to:</i>				
1. <i>completely ignore the everyday concerns of this world to concentrate on the spiritual?</i>	(.26)	(.05)	.81	(.02)
2. <i>fully live a simple life in accordance with religious teaching?</i>	(.28)	(.10)	.76	(.07)
3. <i>fully overcome the restrictions of everyday life and live in accordance with your religious faith?</i>	(.23)	(.04)	.76	(.08)
4. <i>fully devote yourself to performing your religious rituals?</i>	(.27)	(.03)	.72	(.20)
5. <i>totally devote yourself to following religious scriptures?</i>	(.23)	(.06)	.68	(.21)
<u>Identification Strength (Outcome T1)</u>				
<i>To what extent</i>				
1. <i>is being Hindu a key part of your life?</i>	(.07)	.93	(.05)	(.13)
2. <i>is being a Hindu central to your sense of who you are?</i>	(.05)	.83	(.11)	(.16)
3. <i>does being a Hindu matter to you?</i>	(.04)	.79	(.05)	(.13)
<u>Religious Practices (Outcome T1)</u>				
<i>In the last week, how often have you:</i>				
1. <i>performed evening pujas?</i>	(.00)	(.12)	(.09)	.66
2. <i>read/chanted religious texts at home?</i>	(-.03)	(.16)	(.05)	.59
3. <i>performed morning pujas?</i>	(.06)	(.03)	(.13)	.56

Table 3. Hierarchical Regression Model: Predicting Hindu Identification at T3 (Kalpwasis Not at Ceiling)

Model	Step 1				Step 2				Step 3				Step 4				Step 5			
	<u>B</u>	<u>SE</u>	<u><math>\beta</math></u>	<u>VIF</u>	<u>B</u>	<u>SE</u>	<u><math>\beta</math></u>	<u>VIF</u>	<u>B</u>	<u>SE</u>	<u><math>\beta</math></u>	<u>VIF</u>	<u>B</u>	<u>SE</u>	<u><math>\beta</math></u>	<u>VIF</u>	<u>B</u>	<u>SE</u>	<u><math>\beta</math></u>	<u>VIF</u>
1. Identification at T1	-.03	.08	-.04	1.00	-.03	.08	-.04	1.05	-.03	.09	-.04	1.07	-.03	.09	-.04	1.08	-.03	.08	-.04	1.08
2. Age					.01	.01	.13	1.16	.01	.01	.15	1.18	.01	.01	.14	1.19	.01	.01	.12	1.19
Gender					.05	.11	.05	1.26	.09	.16	-.09	2.60	.09	.16	-.08	2.62	.09	.16	-.08	2.62
Caste					.04	.16	.03	1.05	.03	.16	.02	1.10	.03	.16	.02	1.10	-.01	.16	-.00	1.11
Marital-Status					.25	.13	.20	1.21	.26	.13	.21	1.21	.25	.13	.20*	1.30	.28	.13	.23*	1.31
3. Primary-Intermediate University					.25	.13	.25	1.89	.25	.13	.25	1.89	.25	.13	.25	1.89	.28	.13	.27	1.90
					.05	.24	.03	1.94	.06	.24	.03	1.95	.09	.23	.05	1.96				
4. Shared Identity									.03	.09	.03	1.09	-.05	.08	-.05	1.23				1.17
5. Collective Self-Realization													.21	.08	.25*	1.23				
<u>R<sup>2</sup><sub>adj</sub></u>	-.01				.01				.04				.03				.08			
<u><math>\Delta R^2</math></u>	$F(1, 109) = .14$				$F(4, 105) = 1.61$				$F(2, 103) = 2.40$				$F(1, 102) = .10$				$F(1, 101) = 6.44^*$			
<u>ANOVA</u>	$F(1, 109) = .14$				$F(5, 105) = 1.32$				$F(7, 103) = 1.65$				$F(8, 102) = 1.45$				$F(9, 101) = 2.07^*$			

\*  $p < .05$ . \*\*  $p < .01$

Table 4. Hierarchical Regression Model: Predicting Religious Practices at T3

Model	Step 1					Step 2					Step 3					Step 4					Step 5				
	B	SE	$\beta$	VIF	B	SE	$\beta$	VIF	B	SE	$\beta$	VIF	B	SE	$\beta$	VIF	B	SE	$\beta$	VIF	B	SE	$\beta$	VIF	
1. Religious Practices at T1	.49	.04	.55**	1.00	.45	.04	.51**	1.15	.43	.04	.49**	1.28	.43	.04	.49**	1.28	.42	.04	.48**	1.30					
2. Age					-.02	.01	-.11*	1.14	-.02	.01	-.10*	1.15	-.02	.01	-.10*	1.15	-.02	.01	-.10*	1.15					
Gender					.56	.17	.15**	1.25	.43	.22	.11*	1.93	.44	.22	.11*	1.94	.44	.22	.11*	1.94					
Caste					.14	.29	.02	1.02	.10	.30	.01	1.04	.09	.30	.01	1.04	.07	.30	.01	1.04					
Marital-Status					-.52	.19	-.11**	1.06	-.54	.19	-.12**	1.06	-.55	.20	-.12**	1.07	-.56	.20	-.12**	1.07					
3. Primary-Intermediate University					.26	.22	.07	1.91	.26	.22	.07	1.91	.26	.22	.07	1.91	.30	.22	.08	1.93					
4. Shared Identity					.22	.33	.04	1.80	.23	.33	.04	1.81	.26	.33	.04	1.81	.26	.33	.04	1.81					
5. Collective Self-Realization									.08	.13	.03	1.03	.00	.13	.00	1.13				1.12					
																	.29	.13	.09*						
$R^2_{adj}$			.30				.32				.32				.32				.33						
$\Delta R^2$			$F(1, 414) = 179.43^{**}$				$F(4, 410) = 4.21^{**}$				$F(2, 408) = .73$				$F(1, 407) = .41$				$F(1, 406) = 4.36^*$						
ANOVA			$F(1, 414) = 179.43^{**}$				$F(5, 410) = 40.36^{**}$				$F(7, 408) = 29.00^{**}$				$F(8, 407) = 25.39^{**}$				$F(9, 406) = 22.24^{**}$						

\* p < .05. \*\* p < .01

Figure 1. Identification Strength amongst Kalpwasis and Controls at T1 and T3 for those not at ceiling at T1

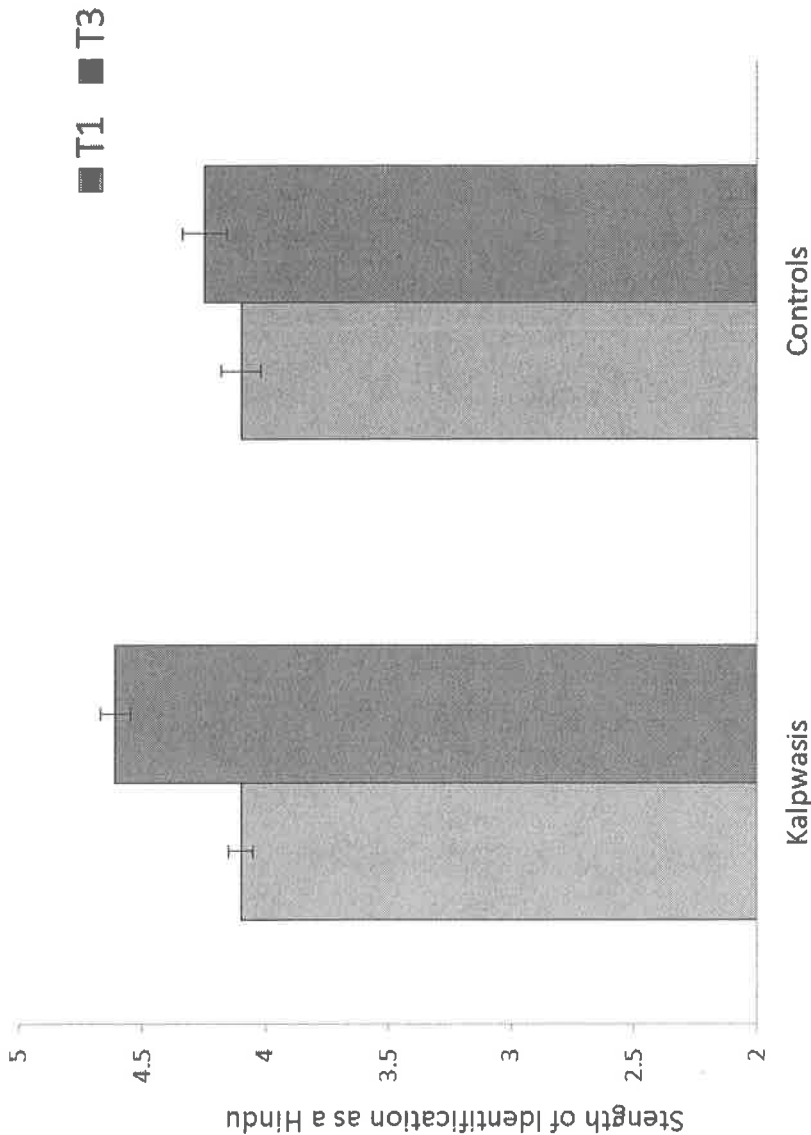


Figure 2. Frequency of Religious Practices in the previous week amongst Kalpwasis and Controls at T1 and T3.

